

DEPARTMENT OF PUBLIC SERVICE REGULATION
BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MONTANA

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| IN THE MATTER OF NorthWestern Energy's |) | REGULATORY DIVISION |
| 2012-2013 Electricity Supply Cost Tracker |) | DOCKET NO. D2013.5.33 |

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| IN THE MATTER OF NorthWestern Energy's |) | REGULATORY DIVISION |
| 2013-2014 Electricity Supply Cost Tracker |) | DOCKET NO. D2014.5.46 |

FACT SHEET

TO: Commissioners, Justin Kraske, Will Rosquist, Eric Eck, and Jason Brown

FROM: Neil Templeton and Scott Fabel

DATE: September 30, 2015

Prior to a public hearing on a docketed matter before the Public Service Commission (Commission), Regulatory Division staff on the work team prepare a Fact Sheet that summarizes the application and the prefiled testimony. The hearing in this docket is scheduled to begin Tuesday October 6, 2015, in Helena.

Introduction and Procedural Background

On May 31, 2013, NorthWestern Energy (NorthWestern) filed its 2013 electricity supply tracker application requesting approval to adjust electricity supply and deferred electricity supply rates.

NorthWestern proposed rates to collect revenues of \$387,357,989 in order to recover electricity supply costs of \$238,472,742; CU4 fixed costs of \$75,915,751; CU4 variable costs of \$25,837,848; DGGS fixed costs of \$28,586,541; DGGS variable costs of \$12,215,388; Spion Kop fixed costs of \$6,245,924; and Spion Kop variable costs equaling \$83,795. NorthWestern also proposed deferred supply rates to amortize \$746,835 in prior period over-collections.

For a typical residential customer using 750 kilowatt-hours (kWh), the proposed rates would increase bills by \$0.03 per month or \$0.36 per year – a 0.04% increase in total bills.

The application included the direct testimony of Kevin Markovich, Frank Bennett, Cheryl Hansen, and William Thomas.

On June 26, 2013 the Commission issued *Interim Order No. 7283*, approving NorthWestern's proposed rates on an interim basis.

On June 19, 2013, the Commission issued a *Notice of Application and Intervention Deadline*. The Commission granted intervention to the Montana Consumer Counsel (MCC), and to Human Resource Council, District XI (HRC) on August 2, 2013.

On February 28, 2014, NorthWestern filed a *Motion to Defer Proceedings and Consolidate this Docket with the 2014 Electricity Supply Tracker*. The MCC filed an *Opposition to Request to Defer Proceedings* on March 14, and NorthWestern filed a *Reply to the MCC's Opposition to Defer and Consolidate Proceedings* on March 24, 2014. On May 6, 2014, the Commission granted NorthWestern's motion to consolidate the 2013 and 2014 electricity supply tracker dockets.

On May 29, 2014 NorthWestern filed its 2014 electricity supply tracker application, which was assigned Docket No. D2014.5.47 and consolidated with the previous year's tracker.

NorthWestern proposed rates to collect revenues of \$370,045,712 in order to recover electricity supply costs of \$218,563,153; CU4 fixed costs of \$75,995,480; CU4 variable costs of \$26,103,790; DGGs fixed costs of \$28,616,562; DGGs variable costs of \$12,043,436; Spion Kop fixed costs of \$8,705,318; and Spion Kop variable costs equaling \$17,976. NorthWestern also proposed deferred supply rates to amortize \$32,044,199 in prior period under-collections.

For a typical residential customer using 750 kilowatt-hours (kWh), the proposed rates would increase bills by \$5.01 per month or \$60.12 per year – a 6.44% increase in total bills.

The application included the direct testimony of Kevin Markovich, Frank Bennett, Joseph Janhunen, and William Thomas.

On June 18, 2014 the Commission issued *Interim Order No. 7283a*, approving NorthWestern's proposed rates on an interim basis.

On June 2, 2014, the Commission issued a *Notice of Application and Intervention Deadline*.

On August 19, 2014, the Commission granted general intervention to the Montana Environmental Information Center and Sierra Club (MEIC).

On October 22, 2014, the Commission issued *Procedural Order 7282b*. On November 17, 2014, the Commission, through delegation of authority to staff, issued a *Notice of Staff Action* modifying *Procedural Order 7283b*.

On December 19, 2014, Siemens Energy, Inc. (SEI) filed a *Motion to Intervene*, a *Motion for Protective Order and Brief in Support*, and the *Affidavit of John P. Musone*. On December 26, 2014, MEIC filed a *Response to SEI's Motion to Intervene and Motion for Protective Order* reserving the right to challenge the treatment of information as trade secret once it is produced and reviewed by counsel. On January 13, 2015, the Commission granted both of SEI's motions. (*Order No. 7283c*, January 20, 2015).

On January 7, 2015, PPL Montana, LLC (PPLM) filed a *Motion to Intervene for the Limited Purpose of Applying for Protective Order, Motion for Protective Order* and the *Affidavit of Charles S. Baker*.

On February 5, 2015, the Commission granted PPLM's *Motion to Intervene* and *Motion for Protective Order*.

On February 27, 2015, the Commission issued *Amended Procedural Order 7283f*.

On May 8, 2015, MEIC filed direct testimony of David Schlissel, and MCC filed direct testimony of George Donkin and John Wilson.

On July 9, 2015, NorthWestern filed an *Unopposed Motion for an Extension*, seeking a one-week extension to file its rebuttal testimony. On July 14, Commission staff further amended *Procedural Order 7283f* to accommodate this request.

On July 24, 2015, NorthWestern filed rebuttal testimony of Patrick Corcoran, James Goetz, Fred Lyon, Ronald Halpern, Robert Ward, Michael Barnes, Kevin Markovich, and Joe Schwartzenberger.

On September 15, 2015, the Commission issued a *Notice of Public Hearing* for an October 6, 2015, hearing.

Summary of NorthWestern's Prefiled Direct Testimony

Kevin J. Markovich

Kevin Markovich is NorthWestern's director of energy supply market operations. In the consolidated docket, Markovich described NorthWestern's actual and proposed procurement and

scheduling activities for the 2012-13, 2013-14, and 2014-15 tracking periods. He testified regarding NorthWestern's efforts to meet its planned objectives and maintain resource adequacy, NorthWestern's response to the CU4 outage, and the open hedging docket N2014.1.11.

Markovich testified that no material operational changes or issues caused supply service in 2012-13 and 2013-14 to change from the previous tracking period. He said market prices remained low and that NorthWestern's procurement strategy allowed it to purchase more energy in the day-ahead and hourly markets.

Markovich testified that NorthWestern reviewed operating protocol at Basin Creek in response to *Final Order 7219h* and found that economic dispatch increased significantly in 2013. NorthWestern is engaging a consultant to help with analysis of the resource.

Markovich stated that NorthWestern expanded its eligible Community Renewable Energy Project (CREP) contracts from 13 MW to 23.05 MW since issuing its 2011 resource procurement plan. Total eligible renewable portfolio standard (RPS) increased from 148 MW to 239 MW over that period. An additional 22 MW is awaiting regulatory review. Markovich testified that a request for proposals (RFP) was issued for CREPs in the 2012-13 tracker period and that another CREP RFP would be issued in June, 2014.

Markovich said that NorthWestern continues to study the impacts of variable wind generation on its integration and portfolio operations. The study effort will be expanded to evaluate operational issues associated with the 60 MW of wind generation that was added to the portfolio in late 2012.

Markovich testified that NorthWestern is actively monitoring regional energy markets and participating in regional groups, including the Intra-Hour Transaction Accelerator Platform (I-TAP). Western utilities initiated I-TAP to develop efficient intra-hour trading. NorthWestern is also monitoring developments in regional energy imbalance markets.

Markovich testified that on July 1, 2013, Colstrip Unit 4 (CU4) tripped off line due to a stator ground fault. On July 19, the owners agreed to replace/restack the iron core of the stator. On January 23, 2014 CU4 officially returned to service. Due to a reciprocal sharing agreement with PPL, NorthWestern's lost production during that period was 111 MW rather than its total share of 222 MW at CU4. Markovich testified that NorthWestern used market purchases and Basin Creek to replace the lost production.

Markovich testified that NorthWestern procured an additional 25 MW of on system indexed energy for December 2012 through May 2014. He also stated that NorthWestern completed an RFP process in June 2013 that resulted in fixed price power purchase contracts for calendar years 2015-17, and indexed power for the second half of 2014.

Markovich stated that NorthWestern did not speculate on energy prices and did not expose ratepayers to unnecessary risk. He said customers did not experience service restrictions or interruptions caused by the Energy Supply function. He said that NorthWestern adhered to its 2011 and 2013 procurement plans, and that the hedging strategies referenced by these plans guided electricity supply procurement and scheduling in 2012-14. Markovich testified that NorthWestern will continue to follow the hedging strategy noted in its 2013 plan until the Commission advises or directs otherwise. He stated NorthWestern is looking for resolution in this matter with Commission guidance in dockets N2014.1.11 (hedging strategy), N2013.12.84 (2013 procurement plan), and D2013.12.85 (hydroelectric acquisition).

William M. Thomas

William Thomas is the manager of regulatory support services for NorthWestern. His prefiled direct testimony presented results from NorthWestern's electricity supply Universal System Benefits (USB) and demand side management (DSM) programs for tracker periods 2012-13 and 2013-14, described plans for the DSM programs in year 2014-15, and provided DSM program costs and Lost Revenue Recovery Mechanism (LRAM) costs associated with electricity supply USB and DSM programs.

The table below shows DSM targets, reported savings, budgets, and spending.

| DSM Targets, Reported Savings, Budgets, and Spending | | | | | | | |
|---|---------------------------|--|------------|------------|--------------|--|--|
| Program Year | Tracker Period | Installed Annual Incremental DSM Capability | | | | Supply DSM Program Budget | Supply DSM Program Expenditures |
| | | Target (aMW) | USB | DSM | Total | | |
| 1 | 2004-05 | 2.60 | 2.04 | 0.22 | 2.26 | \$ 1,457,888 | \$ 320,389 |
| 2 | 2005-06 | 3.70 | 1.33 | 2.08 | 3.41 | 2,097,734 | 1,596,076 |
| 3 | 2006-07 | 5.00 | 0.36 | 3.04 | 3.40 | 3,232,080 | 2,497,359 |
| 4 | 2007-08 | 5.00 | 0.82 | 4.55 | 5.37 | 3,631,683 | 3,688,745 |
| 5 | 2008-09 | 5.00 | 1.11 | 5.58 | 6.69 | 4,917,141 | 5,504,111 |
| 6 | 2009-10 | 5.00 | 0.96 | 7.37 | 8.33 | 6,625,192 | 7,652,658 |
| 7 | 2010-11 | 6.00 | 0.55 | 8.01 | 8.56 | 9,148,219 | 7,108,435 |
| 8 | 2011-12 | 6.00 | 0.45 | 8.87 | 9.32 | 8,063,519 | 9,185,261 |
| 9 | 2012-13 | 6.00 | 0.40 | 7.12 | 7.52 | 10,441,871 | 10,836,590 |
| 10 | 2013-14 | 6.00 | 0.59 | 6.31 | 6.89 | 9,505,745 | 9,339,577 |
| 11 | 2014-15 | 6.00 | | | | 8,835,366 | |

The budget and spending figures in the table above do not include USB programs, although USB savings are counted toward the annual DSM target and are used to calculate lost revenues. The following table shows 2012-13 and 2013-14 reported savings from the USB and DSM programs in detail.

| Annualized Reported USB and DSM Program Savings 2012-2014 | | | | |
|--|-------------------|-------------|-------------------|-------------|
| Electric Efficiency USB Programs | 2012-13 | | 2013-14 | |
| | kWh | aMW | kWh | aMW |
| E+ Energy Audit for the Home or Business | 1,312,959 | 0.15 | 1,344,176 | 0.15 |
| E+ Irrigation | 817,382 | 0.09 | 758,105 | 0.09 |
| Builder Operator Certification | 216,172 | 0.02 | 2,004,298 | 0.23 |
| E+ Free Weatherization Program & Fuel Switch | 250,803 | 0.03 | 384,301 | 0.04 |
| E+ Renewable Energy Program | 891,983 | 0.10 | 610,797 | 0.07 |
| Energy Star New Homes Program | 16,806 | 0.00 | 28,798 | 0.00 |
| Total | 3,506,104 | 0.40 | 5,130,475 | 0.59 |
| Electric Efficiency DSM Programs | 2012-13 | | 2013-14 | |
| | kWh | aMW | kWh | aMW |
| E+ Business Partners Program | 7,585,053 | 0.87 | 3,743,349 | 0.43 |
| E+ Commercial Lighting Rebate Program | 15,717,954 | 1.79 | 13,628,208 | 1.56 |
| E+ Residential Lighting Program | 23,268,959 | 2.66 | 24,547,835 | 2.80 |
| Northwest Energy Efficiency Alliance (NEEA) | 10,050,579 | 1.15 | 10,199,954 | 1.16 |
| Energy Star 80 Plus Program | 2,076,158 | 0.24 | 1,292,350 | 0.15 |
| E+ Residential NC Electric Rebate Program | 5,967 | 0.00 | 9,059 | 0.00 |
| E+ Residential EX Electric Rebate Program | 48,041 | 0.01 | 36,855 | 0.00 |
| E+ Commercial NC Electric Rebate Program | 332,357 | 0.04 | 388,687 | 0.04 |
| E+ Commercial EX Electric Rebate Program | 3,267,951 | 0.37 | 1,393,055 | 0.16 |
| Total | 62,353,018 | 7.12 | 55,239,352 | 6.31 |

The table below shows projected expenditures in 2014-15.

| Projected 2014-15 DSM Program Expenditures | |
|---|-------------------------------|
| Electric DSM Programs | Projected Expenditures |
| General Expenses Related to All DSM Programs | \$ 165,427 |
| E+ Residential Lighting Program | 1,857,249 |
| E+ Residential Electric Savings Program | 15,870 |
| E+ Residential New Construction Program | 7,441 |
| E+ Commercial Lighting Program | 2,725,735 |
| E+ Commercial New Construction Program | 69,815 |
| E+ Business Partners Program | 1,748,607 |
| E+ Commercial Electric Rebate Program | 651,934 |
| Market Transformation (NEEA) | 1,088,121 |
| Total | \$ 8,330,200 |

Update on E+ Lighting Programs

DNV GL (formerly known as KEMA Services) provided lighting program services for NorthWestern residential and commercial customers in 2012-14. Through DNV GL, NorthWestern offered cash rebates for qualified compact fluorescent lamps (CFL) and indoor/outdoor fixtures. The programs included direct installation of CFLs during home energy audits and commercial appraisals, mail-in and instant rebates, rebates to commercial customers for efficient lighting technologies, buy down of CFL prices at retailers, and CFL distribution at trade shows, fairs, farmer's markets, and other special events.

Thomas testified that NorthWestern is renewing its contract with DNV GL for lighting services, and that NorthWestern will offer E+ Lighting programs in 2014-15. He stated that new federal regulations related to efficiency standards began phasing in over three years beginning January 1, 2012. Thomas stated that the new regulations apply to manufacturing and not to retail sale. Thus consumers will continue to purchase and install remaining inventory for perhaps a year or more following effective termination of manufacture. He claimed that energy savings opportunities will remain during the interim period as stocks are cleared out.

Beginning January 1, 2013, NorthWestern modified its baseline for replaced lamps from 100W to 75W for 23W-30W CFLs. Beginning January 1, 2014 NorthWestern modified its baseline replaced lamp to 60W for CFLs 13W and greater. Beginning January 1, 2015 NorthWestern intends to use halogen incandescent lamps as baseline lamps. The table below compares the wattages of halogen incandescent lamps and CFLs of comparable output.

| Halogen Lamp and CFL Capacity and Output | | |
|---|-----------------|---------------------------------------|
| Halogen Incandescent Lamp Capacity (Watts) | Output (Lumens) | CFL Replacement Lamp Capacity (Watts) |
| 29 | 450 | 9-13 |
| 43 | 800 | 13-15 |
| 53 | 1,100 | 15-18 |
| 72 | 1,600 | 23-30 |

Changes to Other DSM Programs

Thomas testified that NorthWestern has taken additional steps to increase acquisition of commercial sector DSM by contracting with firms to provide services in support of the Business Partners, Commercial Lighting Rebate, and Commercial Electric Rebate programs.

Thomas stated that five contractors concentrate on the commercial and small industrial sectors: CTA Associates, Energy Resource Management, McKinstry Essention, Portland Energy Conservation, and National Center for Appropriate Technology (NCAT). These firms are compensated by NorthWestern on a performance basis to provide DSM services. Payment is based on a percentage of the energy conservation resource value of completed projects. All contractors are expected to deliver a minimum of 0.25 aMW in incremental DSM each year.

The contractors provide surveys and assessments of buildings and facilities, technical assistance for building owners, assistance with engineering analysis and modeling, and assistance with forms, contracts, and other paperwork. The contractors are supported by a team of DNV GL employees who engage in direct contact, face-to-face marketing of DSM programs to commercial and small industrial customers. The contractors and support market DSM products to architect and engineering firms, trade and industry associations, and candidate business firms with DSM potential.

The following table shows estimated savings and commercial project tallies for the contractors over tracker periods 2012-13 and 2013-14.

| DSM Support Contractor Performance in 2012-14 Estimated Energy Savings and Commercial Project Tallies | | | | |
|--|----------------------|---------------------------|--------------------------|--------------------------|
| Contractors | Energy Savings (aMW) | Custom Incentive Projects | Lighting Rebate Projects | Electric Rebate Projects |
| CTA Associates | 0.567 | 14 | 66 | 12 |
| Energy Resource Management | 0.373 | 8 | 27 | 1 |
| Mckinstry Essention | 0.393 | 1 | 32 | 31 |
| Portland Energy Conservation | 0.052 | - | - | 14 |
| NCAT | 2.920 | 52 | 325 | 47 |
| Total | 4.305 | 75 | 450 | 105 |

Northwest Energy Efficiency Alliance (NEEA)

NEEA is a regional non-profit supported by electric utilities, public benefits administrators, state governments, public interest groups, and energy efficiency representatives. NEEA encourages market transformation for energy efficient products and services in Montana, Idaho, Washington, and Oregon. NorthWestern is committed to funding and participating in NEEA projects through 2014. NorthWestern reported energy savings from NEEA activities totaling 0.38 aMW during the 2012-13 tracker period, and 1.24 aMW in 2013-14.

E+ New Homes

NorthWestern runs the E+ New Homes program with assistance from NCAT. The program provides builder/owner education, technical assistance, marketing, and outreach services. The program uses USB funds to market the program and educate architects, building contractors, and interested customers about ENERGY STAR® standards. NEEA also provides funding. In NorthWestern's Montana service area, two new electrically heated homes were certified in 2012-13, and 51 new natural gas heated homes were built with an average of 85% ENERGY STAR® lighting. In 2013-14 zero electrically heated and 82 new natural gas heated homes were certified.

E+ Electric Motor Rebate

NorthWestern folded this program into its Commercial Electric Rebate programs. The program sponsors motor management seminars and offers rebates for qualified motor rewinds. Currently, only four service centers in NorthWestern's service area rewind motors.

Other Activities

Thomas testified that NorthWestern sponsored several DSM related training seminars in 2012-13 and 2013-14. The training sessions inform participants about efficient electrical equipment and promote NorthWestern's DSM programs, resources, and incentives. NorthWestern funds the seminars using a blend of DSM and USB monies. NorthWestern also promoted its DSM programs in 2012-14 through participation in trade shows, professional conferences, and many other special events.

Historical and Projected DSM Lost Revenues

In Exhibit (WMT-3) Thomas presented lost revenues for Montana area transmission and distribution, Colstrip Unit 4, Dave Gates Generating Station, and Spion Kop. The table below shows lost revenues at NorthWestern facilities, updated according to information contained in the response to data request MCC-061 and the testimony of Joe Schwartzenberger.

| NorthWestern Electric DSM Lost Revenues | | | | | |
|--|---------------------|---------------------|-------------------------------|-------------------|------------------------|
| Tracker Period | Montana T&D | Colstrip Unit #4 | Dave Gates Generating Station | Spion Kop | Total DSM Lost Revenue |
| 2011-12 | \$ 2,307,045 | \$ 1,808,216 | \$ 215,603 | \$ - | \$ 4,330,864 |
| 2012-13 | 4,079,918 | 2,524,213 | 504,221 | 18,029 | 7,126,381 |
| 2013-14 | 5,916,696 | 3,233,963 | 771,478 | 75,837 | 9,997,974 |
| 2014-15 | 7,499,123 | 3,870,114 | 1,011,021 | 161,135 | 12,541,393 |
| Total | \$19,802,782 | \$11,436,506 | \$ 2,502,323 | \$ 255,001 | \$ 33,996,612 |

Frank V. Bennett

Frank Bennett provided testimony on the updates to the costs included in the 12-month ended June 2013 tracker period with 9 months of actual numbers and 3 months of estimated numbers; components included within the 12-month electricity supply cost tracker for the period ended June 2013; and the forecast costs of the 12-month ended June 2014 tracker period.

Bennett stated the tracker period ending June 2013 in Docket No. D2012.5.49 included 12 estimated months, July 2012 through June 2013. He also provided testimony that NorthWestern has included the full rate-based volume of unit contingent energy associated with 222 MW of capacity in the tracker from Colstrip Unit 4 (CU4).

NorthWestern has incorporated the variable costs associated with the provision of regulation service by DGGS that are included in the DGGS true-up. NorthWestern has included 7 MW of energy from DGGS in the tracker to serve retail load. NorthWestern has also included the variable energy volumes generated by Spion's 40 MW of capacity in the tracker. The variable costs associated with Spion are included in the Spion true-up.

Bennett stated that he removed all associated wind regulation charges for the UMGF project from the 2005-06 tracker period forward for the periods of time that NorthWestern Energy Supply was not purchasing the output from this facility. These removed regulation charges are not part of the Transmission Business Unit rate that NorthWestern charges to its retail customers, but are absorbed by NorthWestern's equity holders.

Bennett stated the forecast information for the July 2012 through June 2013 period has been updated in this filing with actual information¹ for July 2012 through March 2013, and estimates for April, May, and June of 2013, and is included as Exhibit__(FVB-1)12-13.

The actual numbers identify the load, specific monthly resource quantities bought and sold, and related costs for each month in NorthWestern's electricity supply portfolio. Pages 3 and 4 of Exhibit__(FVB-1)12-13 show that during the 12-month tracker period ending June 2013, NorthWestern expects Total Delivered Supply to be 6,518,048 megawatt hours ("MWh") of electricity. A total of 1,814,128 MWh of this electricity is attributable to our rate-based assets. The remaining 4,703,920 MWh of electricity is projected to be purchased at a cost of \$223,454,237 to NorthWestern's electricity supply customers. The July 2012 beginning Deferred Account balance was a \$15,312,718 under-collection for the market-based supply portion. Incorporating this under-collection with 9 months of actual and 3 months of estimated information, the 12 months ended June 2013 Deferred Account balance is forecasted to be a \$(3,477,111) over-collection (refer to Exhibit__(FVB-1)12-13, page 2).

Bennett explained there are three basic cost components of the electric supply portfolio: (1) Electric Supply Expenses; (2) Transmission Costs; and (3) Administrative Expense.

Electric Supply Expenses

- A. Off System Transactions – These fixed and indexed price transactions have a delivery point outside of NorthWestern's service territory. Most of these transactions are at the Mid-Columbia trading hub and are used for hedging purposes.
- B. On System Transactions – These fixed and indexed price transactions have a delivery point on or within NorthWestern's service territory and include the following:
 - 1. Fixed Price Transactions
 - a. Rate-Based Assets – This includes any energy contributed to the Supply Portfolio by NorthWestern's owned generation assets, described below. This

energy reduces market purchases that would otherwise be made to balance loads with owned resources.

- i) CU4 is a generation asset approved for inclusion in rates in Docket No. D2008.6.69, Order No. 6925f at the volume of unit contingent energy associated with 222 MW of capacity. This asset was originally included as a rate-based facility in January 2009.
- ii) DGGS at Mill Creek is a generation asset approved for inclusion in rates by Order No. 6943e in Docket No. D2008.8.95. NorthWestern includes 7 MW of base load energy as a result of minimum turndown from generating unit operations. This asset was included as a rate-based facility starting January 1, 2011.
- iii) Spion is a generation asset approved for inclusion in rates by Order No. 7159l in Docket No. D2011.5.41. NorthWestern includes the variable energy volumes generated by Spion's 40 MW of capacity. This asset was included as a rate-based facility starting December 1, 2012.

b. Base Fixed Price Purchases

- i) A 200 MW peak, 125 MW off-peak contract with PPL Montana, LLC ("PPL") that is supplied seven days per week, 24 hours per day, on a firm basis. This contract expires on June 30, 2014.
- ii) The variable energy generated from the Judith Gap Energy, LLC ("Judith Gap") wind turbine facility with 135 MW of capacity. Judith Gap achieved commercial operation on February 16, 2006. This contract expires on December 31, 2026.
- iii) The energy generated by two hydroelectric power purchase agreements totaling approximately 20 MW of capacity.
- iv) The energy associated with approximately 100 MW of capacity from Qualifying Facility ("QF") contracts entered into prior to 1999. Under Tier II settlements, only a portion of the costs of these contracts is recovered from retail customers through the tracker. The 9-months actual and 3-months estimate shows that these Tier II QFs will meet the 807,609 MWh per year target included in the Stipulation.
- v) The variable energy generated by approximately 46 MW of capacity under various QF supply agreements in two primary groups. The first group includes agreements for approximately 32 MW of capacity that convey renewable energy credits ("RECs") to NorthWestern, which then uses them to meet its renewable energy requirements. The second group includes approximately 14 MW of generation under which the associated RECs remain with the QF (United Materials of Great Falls, plus other small QFs).
- vi) Short- and medium-term market power purchases and sales transacted with various suppliers to balance variable customer demand with electricity supply. The energy requirements vary in part due to customer use and seasonal weather impacts that affect demand.

2. Index Price Transactions

- a. Base, short-term, and medium-term market power purchases and sales transacted with various suppliers to balance variable customer demand with electricity supply. The energy requirements vary in part due to customer use and seasonal weather impacts that affect demand.
 - b. Imbalance charges in three categories, including current month estimates of purchases and sales, prior month true-ups of the earlier estimated values, and accounting and Balancing Authority Area (“BAA”) expenses that adjust accounts not tied directly with a specific meter or customer.
- C. Ancillary and Other – The following are portfolio supply-related costs that are not actual energy-based power purchase agreements but are required to address the needs of the retail supply portfolio:
 - 1. Approximately 50 MW of dispatchable capacity from Basin Creek Equity Partners, LLC (“Basin Creek”). The Basin Creek plant achieved commercial operation on July 1, 2006. This contract will expire on July 1, 2026, unless extended for a five-year term in accordance with the contract terms.
 - 2. Operating Reserves which are the contingency reserves required to be in place under NorthWestern’s BAA transmission tariff. This line item includes the fixed costs of the portion of Basin Creek used to provide operating reserves.
 - 3. Expenses related to “wind other costs” incurred by NorthWestern to fully incorporate wind supply contracts into NorthWestern’s energy supply portfolio. These other wind costs include Judith Gap costs, wind modeling, 3TIER services, Fergus Electric service at the met tower site leases, Western Renewable Energy Generation Information System fees, and other direct wind costs.
 - 4. Demand Side Management (“DSM”) program implementation costs directly involved with DSM programs and projects and Transmission and Distribution Lost Revenues related to DSM and Universal System Benefits programs, which are all included as expenses.

Transmission Costs

These are costs of network transmission service and those associated with moving electricity off-system via point-to-point transmission service for resource balancing as well as other “ancillary services” required for system integrity and reliability.

Regulation and Frequency Response Service is an ancillary service which provides instantaneous voltage and energy regulation to balance load and resources. Because this service has been provided by the DGGs Generation Asset since January 1, 2011, these costs are now included in the DGGs portion of this filing.

Costs of the transmission facilities utilized to transmit and distribute energy to electric supply customers are included in delivery rates and, as such, no additional revenue is collected for these costs in this tracker filing.

Administrative Expenses

Incremental administrative and general costs in excess of those recovered through the last general rate case filing of \$1,594,818, or approximately 0.71% of total electric supply expenses. These costs include outside legal services, scheduling, software, broker costs, real-time transactions, and other incremental expenses directly related to the electric supply function (such as outside consultants to assist with procurement activities).

Bennett summarized the results of the 12-month ended June 2013 tracker period on pages FVB-14 and FVB-15 of his direct testimony, showing an over-collection of \$3,477,111.

Bennett stated NWE's electricity supply forecasted total delivered supply is estimated at 6,491,589 MWh, as shown on page 3 of Exhibit__ (FVB-2)13-14 for the 12-month period ending June 2014. He also summarized the 12-month ended June 2014 forecast tracker period in his prefiled direct testimony on page FVB-18 showing total revenues needed in the amount of \$236,217,429 which includes the \$3,477,111 over-collection for the 2012-2013 tracker period.

Bennett summarized the 12-month ended June 2013 CU4 deferred balance on page FVB-4 of his prefiled CU4 true-up direct testimony, showing a \$1,868,066 over collection. On page FV-6 of this same testimony he provided the changes within the CU4 revenue and expense categories for the 12-months ended June 2014 forecast true-up period.

Bennett summarized the 12-month ended June 2013 DGGS deferred balance on page FVB-4 of his prefiled DGGS true-up direct testimony showing a \$4,598,342 under- collection. On page FV-6 of this same testimony he provided the changes within the DGGS revenue and expense categories for the 12-months ended June 2014 forecast true-up period.

Bennett summarized on page FV-3 of his prefiled Spion true-up direct testimony the changes within the DGGS revenue and expense categories for the 12-months ended June 2014 forecast true-up period.

Bennett stated the tracker period ending June 2014 in Docket No. D2013.5.33 included 12 estimated months, July 2013 through June 2014. He also provided testimony that

NorthWestern has included the full rate-based volume of unit contingent energy associated with 222 MW of capacity in the tracker from CU4.

NorthWestern has incorporated the variable costs associated with the provision of regulation service by DGGs, are included in the DGGs true-up. NorthWestern has included 7 MW of energy from DGGs in the tracker to serve retail load. NorthWestern has also included the variable energy volumes generated by Spion's 40 MW of capacity in the tracker. The variable costs associated with Spion are included in the Spion true-up.

Bennett stated that he removed all associated wind regulation charges for the UMGF project from the 2005/2006 tracker period forward for the periods of time that NorthWestern Energy Supply was not purchasing the output from this facility. These removed regulation charges are not part of the Transmission Business Unit rate NorthWestern charges to its retail customers, but are absorbed by NorthWestern's equity holders.

Bennett stated the forecast information for the July 2013 through June 2014 period has been updated in this filing with actual information¹ for July 2013 through March 2014, and estimates for April, May, and June of 2014, and is included as Exhibit__(FVB-1)13-14. The actual numbers identify the load, specific monthly resource quantities bought and sold, and related costs for each month in NorthWestern's electricity supply portfolio. Pages 3 and 4 of Exhibit__(FVB-1)13-14 show that during the 12-month tracker period ending June 2014, NorthWestern expects Total Delivered Supply to be 6,700,226 MWh of electricity. A total of 1,378,556 MWh of this electricity is attributable to rate-based assets. The remaining 5,321,671 MWh of electricity is projected to be purchased at a cost of \$267,973,383 to NorthWestern's electricity supply customers.

The July 2013 beginning Deferred Account balance was a \$215,706 under-collection for the market-based supply portion. Incorporating this under-collection with 9 months of actual and 3 months of estimated information, the 12 months ended June 2013 Deferred Account balance is forecasted to be a \$34,320,720 under-collection (refer to Exhibit__(FVB-1)13-14, page 2).

Incremental administrative and general costs in excess of those recovered through the last general rate case filing total \$2,248,317, or approximately 0.82% of total electric supply expenses.

Bennett's summarized the results of the 12-month ended June 2014 tracker period on pages FVB-14 and FVB-15 of his direct testimony, showing an under-collection of \$34,320,720.

Bennett stated NWE's electricity supply forecasted total delivered supply is estimated at 6,497,665 MWh, as shown on page 3 of Exhibit__ (FVB-2)14-15 for the 12-month period ending June 2015. He also summarize the 12-month ended June 2015 forecast tracker period in his prefiled direct testimony on page FVB-18 showing total revenues needed in the amount of \$254,093,425 which includes the \$34,320,720 under-collection for the 2013-2014 tracker period.

Bennett summarized the 12-month ended June 2014 CU4 deferred balance on page FVB-5 of his prefiled CU4 true-up direct testimony showing a \$2,667,589 over collection. On page FV-7 of this same testimony he provides the changes within the CU4 revenue and expense categories for the 12-months ended June 2015 forecast true-up period.

Bennett summarized the 12-month ended June 2014 DGGS deferred balance on page FVB-5 of his prefiled DGGS true-up direct testimony showing a \$375,220 under- collection. On page FV-6 of this same testimony he provides the changes within the DGGS revenue and expense categories for the 12-months ended June 2015 forecast true-up period.

Bennett summarized the 12-month ended June 2014 Spion deferred balance on page FVB-4 of his prefiled Spion true-up direct testimony showing a \$15,848 under- collection. On page FV-6 of this same testimony he provides the changes within the Spion revenue and expense categories for the 12-months ended June 2015 forecast true-up period.

Cheryl A. Hansen

Hansen's testimony presents the 2013-2014 tracker year billing statistics and explains how they are derived; the derivation of proposed electricity deferred supply rates resulting from the over/under collection reflected in both the 2011-2012 true-up period and the 2012-2013 true-up period; the derivation of proposed electricity supply rates for the forecasted 2013-2014 tracker period; and the overall total supply rates incorporating all individual rate components.

Hansen stated that the tracker period usage and billing statistics were developed using the same methodology as that presented in previous NorthWestern filings. The methodology utilizes historical actual billed data, weather adjustments, known changes, and forecasted loads to derive the estimated usage for the July 2013 to June 2014 tracker period.

Cyclical usage represents customer usage billed throughout a calendar month on each of 21 yearly billing cycles that normally include usage for the current and prior month (e.g., a July

15 meter read includes 15 days of usage in July and 15 days of usage in June). Calendar usage, represents a customer's adjusted usage as if it was recorded for the calendar month.

The electricity supply cost account balance for the 12-month period ending June 2013 is an over-collection of \$(3,477,111) as presented on page 1 of Exhibit__(CAH-2)13-14. In the annual filing submitted on May 31, 2012, the net deferred account balance for the 2011-2012 tracker period was shown as an under collection of \$11,496,428. This amount becomes the starting balance in this filing. Added to this balance is the prior period true-up for the 2 months of estimated data included in the May 2012 filing.

The resulting actual under-collected ending balance of \$15,312,718 is the deferred account beginning balance for the 2012-2013 tracker period. This balance is then combined with the current year monthly activity shown on Exhibit__(CAH-2)13-14, page 1, resulting in a net under-collected balance of \$2,773,682 for the 2011-2012 tracker period. The months of April, May and June 2013 are estimated and will be trued-up in the next annual electric supply filing.

Total Electric Deferred Supply Cost Account Balance

| | |
|--|----------------------|
| 2011-2012 Prior Period Supply Cost Account Balance | \$2,773,682 |
| 2012-2013 Current Period Supply Cost Account Balance | <u>\$(6,250,793)</u> |
| | \$(3,477,111) |

When all of the individual fixed and variable rate components are bundled together into a single rate for customer billing the total Net Supply Revenue change is \$10,697,409.

The CU4 variable cost account balance for the 12-month period ending June 2013 is an over-collection of \$(1,868,066). In the annual filing submitted on May 31, 2012, the net deferred account balance for the 2011-2012 true-up period was shown as an over-collection of \$(2,993,971). This amount becomes the starting balance in this filing. Added to this balance is the prior period true-up for the 2 months of estimated data included in the May 2012 filing.

The resulting actual ending balance of \$(5,239,576) is the deferred account beginning balance for the 2012-2013 true-up period. This balance is then combined with the current year deferred monthly activity shown on Exhibit__(CAH-3)13-14, page 1, resulting in a net over-

collected balance of \$(377,522) for the 2011-2012 true-up period. The months of April, May and June 2013 are estimated and will be trued-up in the next annual filing.

The total deferred CU4 variable cost account adjustment proposed in this filing is an under-collection of \$(1,868,066)

Total Deferred CU4 Variable Cost Account Balance

| | |
|---|----------------------|
| 2011-2012 Prior Period CU4 Variable Account Balance | \$(377,522) |
| 2012-2013 Current Period CU4 Variable Account Balance | <u>\$(1,490,544)</u> |
| | \$(1,868,066) |

The CU4 fixed cost of service rate component presented in this filing remains unchanged and will not change until an order is issued in any subsequent revenue requirement filing that deals with CU4.

The DGGS variable cost account balance for the 12-month period ending June 2013 is an under-collection of \$4,598,342 as presented on page 1 of Exhibit__(CAH-4)13-14.

In the DGGS annual filing submitted on May 31, 2012, the net deferred account balance for the 2011-2012 true-up period was shown as an over-collection of \$(161,231). This amount becomes the starting balance in this filing. Added to this balance is the prior period true-up for the 2 months of estimated data included in the May 2012 filing. Page 1 of Exhibit__(CAH-4)13-14 shows the true-up of the previously estimated months of May and June 2012 with actual data for these months. This results in an actual under-collected ending balance of \$755,103.

Next, an adjustment is included to reflect compliance with Docket No. D2012.5.49, Interim Order No. 7219a (“Interim Order”). As directed in the Interim Order, the deferred rates that went into effect August 1, 2012 were based on an over-collected balance of \$(1,861,161). The difference between the Interim Order amount and the actual ending balance discussed above is \$(2,616,264). The resulting adjusted balance of \$(1,861,161) is the deferred account beginning balance for the 2012-2013 true-up period. This amount combined with the current year monthly activity shown on Exhibit__(CAH-4)13-14, page 1, and the add back of the \$2,616,264 adjusted amount results in an under-collected balance of \$2,203,177 for the 2011-2012 true-up period. The months of April, May and June 2013 are estimated and will be trued-up in the next annual filing.

The total deferred DGGS variable cost account adjustment proposed in this filing is an under-collection of \$4,598,342.

Total Deferred DGGS Variable Cost Account Balance

| | |
|--|--------------------|
| 2011-2012 Prior Period DGGS Variable Account Balance | \$2,203,177 |
| 2012-2013 Current Period DGGS Variable Account Balance | <u>\$2,395,166</u> |
| | \$4,598,342 |

The total DGGS variable cost of \$12,212,532 is the sum of forecasted fuel costs, revenue credits, DSM Lost Revenues, incremental property taxes, carrying costs, and the energy supply costs for the 7MW output. The resulting rates are the proposed DGGS variable rates.

Docket No. D2008.8.95 Order No. 6943e (“Order”) directed NWE to refund to ratepayers a net over-collected amount, including interest. In compliance with the Order, NWE proposed in the May 2012 Electric Supply monthly filing DGGS fixed cost rebate rates effective May 1, 2012. By letter dated May 10, 2013 NWE noted that the over-collection balance was close to being extinguished and requested that the DGGS fixed cost rebate rates be expired and set to zero effective May 13, 2013.

Derivation of the Spion variable rates is shown on Exhibit__(CAH-5)13-14, page 1. In this filing, the Demand Side Management (“DSM”) Lost Revenues associated with Spion for the period December 2012 through June 2013 are included in the 2013-2014 forecasted period; therefore, the 2012-2013 prior period beginning balance is zero. The total Spion variable cost of \$87,012 is the sum of incremental property taxes, DSM Lost Revenues (including the 2012-2013 prior period amount), and carrying costs from Exhibit__(FVB-8)13-14. This sum is the amount used to derive the Spion variable rates. The forecasted loads used in the derivation are from Exhibit__(CAH-1)13-14, page 6. The resulting rates are the Spion variable rates proposed in this filing.

The Spion fixed cost of service rate components as presented in this filing remain as ordered by the Commission in Docket No. D2011.5.41 and will not change until an order is issued by the Commission in any subsequent revenue requirement filing dealing with Spion.

To derive the total 2013-2014 deferred supply rates proposed in this filing The total electric supply rate currently includes several separate rate components – an electricity supply tracker rate, a CU4 fixed cost of service rate, a CU4 variable rate, a DGGS fixed cost of service

rate, a DGGS variable rate, a Spion fixed cost of service rate, and a Spion variable rate. These separate rate components are bundled together into a single rate for customer billing

Joseph S. Janhunnen

The purpose of Janhunnen’s testimony is to present the 2014-2015 tracker year billing statistics and explain how they are derived. Present the derivation of proposed electricity deferred supply rates resulting from the over/under collection reflected in both the 2012-2013 true-up period and the 2013-2014 true-up period. Present the derivation of proposed electricity supply rates for the forecasted 2014-2015 tracker period. And to present the overall total supply rates incorporating all individual rate components.

The electricity supply cost account balance for the 12-month period ending June 2014 is an under-collection of \$34,320,720. In the annual filing submitted on May 31, 2013, the net deferred account balance for the 2012-2013 tracker period was shown as an over-collection of \$(3,477,111). This amount becomes the starting balance in this filing. Added to this balance is the prior period true-up for the 3 months of estimated data included in the May 2013 filing. The resulting actual under-collected ending balance of \$215,706 is the deferred account beginning balance for the 2013-2014 tracker period. This balance is then combined with the current year monthly activity resulting in a net under-collected balance of \$3,224,459 for the 2012-2013 tracker period. The months of April, May and June 2014 are estimated and will be trued-up in the next annual electric supply filing.

Total Electric Deferred Cost Account Balance

| | |
|--|---------------------|
| 2011-2012 Prior Period DGGS Variable Account Balance | \$3,224,459 |
| 2012-2013 Current Period DGGS Variable Account Balance | <u>\$31,096,261</u> |
| | \$34,320,720 |

Order No. 7219h (“Order”) directed NorthWestern to refund to ratepayers a net over-collected amount, including interest. The net over-collection represented DSM revenues based on the five-year true-up. NorthWestern was directed to credit the over-collection balance to customers over a six-month period. In compliance with the Order, NorthWestern proposed in the January 2014 Electric Supply monthly filing T&D DSM rebate rates effective January 1, 2014.

Total Electric Deferred Cost Account Balance

| | |
|--|--------------|
| Total Deferred Electricity Supply Under-Collection Balance | \$34,320,720 |
| Total Deferred CU4 Variable Over-Collection Balance | \$-2,667,589 |
| Total Deferred DGGS Variable Under-Collection Balance | \$375,220 |
| Total Deferred Spion Variable Under-Collection Balance | \$ 15,848 |
| | <hr/> |
| | \$32,044,199 |

The total electric supply rate currently includes several separate rate components – an electricity supply tracker rate, a CU4 fixed cost of service rate, a CU4 variable rate, a DGGS fixed cost of service rate, a DGGS variable rate, a Spion fixed cost of service rate, and a Spion variable rate.

When all of the individual fixed and variable rate components are bundled together into a single rate for customer billing the total Net Supply Revenue change is \$5,827,953.

The CU4 variable cost account balance for the 12-month period ending June 2014 is an over-collection of \$(2,667,589). This includes the prior period balance for the 2012-2013 true-up period and the current period balance for the 2013-2014 true-up period.

In the CU4 annual filing submitted on May 31, 2013, the net deferred account balance for the 2012-2013 true-up period was shown as an over-collection of \$(1,868,066). This amount becomes the starting balance in this filing. Added to this balance is the prior period true-up for the 3 months of estimated data included in the May 2013 filing. The resulting actual ending balance of \$(1,859,563) is the deferred account beginning balance for the 2013-2014 true-up period.

The total deferred CU4 variable cost account adjustment proposed in this filing is an over-collection of \$(2,667,589)

Total Deferred CU4 Variable Account Balance

| | |
|---|--------------|
| 2012-2013 Prior Period CU4 Variable Account Balance | \$56,834 |
| 2012-2013 Current Period CU4 Variable Account Balance | \$-2,724,423 |
| | <hr/> |
| | \$2,667,589 |

The CU4 fixed cost of service rate component presented in this filing remains unchanged and will not change until an order is issued in any subsequent revenue requirement filing that deals with CU4.

The DGGS variable cost account balance for the 12-month period ending June 2014 is an under-collection of \$375,220.

In the DGGS annual filing submitted on May 31, 2013, the net deferred account balance for the 2012-2013 true-up period was shown as an under-collection of \$4,598,342. This amount becomes the starting balance in this filing. Added to this balance is the prior period true-up for the 3 months of estimated data included in the May 2013 filing. This results in an actual under-collected ending balance of \$6,232,587.

Next, this amount is combined with the current year monthly resulting in an under-collected balance of \$2,747,796 for the 2012-2013 true-up period. The months of April, May and June 2014 are estimated and will be trued-up in the next annual filing.

The total deferred DGGS variable cost account adjustment proposed in this filing is an under-collection of \$375,220.

Total Deferred DGGS Variable Account Balance

| | |
|--|--------------|
| 2012-2013 Prior Period DGGS Variable Account Balance | \$2,747,796 |
| 2012-2013 Current Period DGGS Variable Account Balance | \$-2,372,576 |
| | <hr/> |
| | \$375,220 |

The total DGGS variable cost of \$12,045,813 is the sum of forecasted fuel costs, revenue credits, Demand-Side Management (“DSM”) lost revenues, incremental property taxes, carrying costs, and the energy supply costs for the 7MW output.

Docket No. D2012.5.49 Order No. 7219h (“Order”) directed NorthWestern to refund to ratepayers a net over-collected amount, including interest. The net over-collection represented DSM revenues based on the five-year true-up. NorthWestern was directed to credit the over-collection balance to customers over a six-month period. In compliance with the Order, NorthWestern proposed in the January 2014 Electric Supply monthly filing DGGS DSM rebate rates effective January 1, 2014.

In the annual filing for Spion submitted on May 31, 2013, the net deferred account balance for the 2012-2013 true-up period was shown as an even-collection of \$0. This amount becomes the starting balance in this filing.

The total deferred Spion variable cost account adjustment proposed in this filing is an under-collection of \$15,848.

Total Deferred Spion Variable Account Balance

| | |
|---|----------------|
| 2012-2013 Prior Period Spion Variable Account Balance | \$0 |
| 2012-2013 Current Period Spion Variable Account Balance | \$15,848 |
| | <hr/> \$15,848 |

The rate design methodology used in this filing to derive the proposed 2014-2015 forecasted Spion variable rates is the same as that presented in previous Spion filings.

The Spion fixed cost of service rate components presented in this filing are those ordered by the Commission in Docket No. D2011.5.41. The Spion fixed rate components include rates effective January 1, 2014 reflecting the second year revenue requirement and will not change until an order is issued by the Commission in any subsequent revenue requirement filing dealing with Spion.

The total deferred supply rate includes four separate rate components – a deferred electricity supply rate, a deferred CU4 variable rate, a deferred DGGS variable rate, and a deferred Spion variable rate. These separate rate components are bundled together into a single rate for customer billing.

The total electric supply rate currently includes several separate rate components – an electricity supply tracker rate, a CU4 fixed cost of service rate, a CU4 variable rate, a DGGS fixed cost of service rate, a DGGS variable rate, a Spion fixed cost of service rate, and a Spion variable rate. These separate rate components are bundled together into a single rate for customer billing.

Summary of MEIC / Sierra Club's Prefiled Direct Testimony

David A. Schlissel

On May 8, 2015, David Schlissel filed direct testimony on behalf of MEIC. His testimony included confidential information concerning the Root Cause Analysis that was only available to parties willing to sign a non-disclosure agreement. This summary does not address the protected portion of his testimony.

Schlissel testified that according to the Root Cause Analysis, the generator failure was caused by damage during overhaul reassembly. Siemens, the OEM, performed the overhaul, and PPL Montana was not found negligent or imprudent regarding the outage. The Root Cause Analysis did not address the imprudence or negligence of Siemens.

Schlissel stated that NorthWestern has not decided whether to sue Siemens for damages, citing statutes that allow plenty of time for contract and tort claims. NorthWestern is not aware of other CU4 owners that have attempted to recover costs from Siemens or any third party. Schlissel asserted that evidence suggests that Portland General Electric or Factory Mutual Insurance Company, the property insurer for CU4, may have conducted a root cause analysis.

NorthWestern is imprudent to seek to recover replacement power costs from ratepayers before seeking recovery from Siemens or evaluating an action against Siemens.

Schlissel testified that business interruption insurance would have provided protection from the risk of paying all replacement power costs, and that NorthWestern failed to evaluate the availability, cost, and potential benefit of business interruption insurance before the outage. It should have evaluated such insurance because CU4 experienced a forced outage in 2009 and has experienced significant problems since. Also, since ratepayers were required to pay for significant and unavoidable CU4 fixed costs during the outage, they deserve any economically justifiable protection from avoidable replacement power costs.

Schlissel asserted that that only NorthWestern was in a position to evaluate the prudence of obtaining business interruption insurance. Such insurance might have value in light of CU4's operational history, the plant's current condition, and its current operation and maintenance practice. NorthWestern's failure to evaluate business interruption insurance should lead the Commission to deny recovery of replacement power costs that could have been insured.

Schlissel testified that NorthWestern's application did not account for reductions in O&M expenses resulting from the outage, such as cost savings from the furloughing of 36 workers for approximately three months during the outage. These savings might not flow through to ratepayers unless accounted for in this tracker.

Schlissel testified that NorthWestern did not explain the cause of the outage or quantify the cost of replacement power in its application or supporting testimony. He stated that, instead, the Company attempted to justify not calculating the cost of replacement power.

Summary of MCC's Prefiled Direct Testimony

George L. Donkin

On May 8, 2015, George Donkin filed direct testimony on behalf of MCC regarding NorthWestern's off-system hedging practices. He recommended that the Commission direct

NorthWestern to terminate its off-system electricity supply cost hedging strategies and activities. He also recommended that the Commission disallow as imprudently incurred costs any net hedging losses resulting from deals entered into after November 18, 2014, the closing date for NorthWestern on its Hydros acquisition.

Donkin cited to his previous testimony in Docket No. 2012.5.49, in which he also recommended that the Commission direct NorthWestern to terminate its hedging program. He noted that NorthWestern's Mid-C hedges are similar to its natural gas price swaps that produced \$80.9 million in hedging losses through March 2013. He argued that because NorthWestern's hedging counterparties put their own money at risk, they have great incentive to pursue gain and avoid losses; while NorthWestern is only trying to stabilize prices, and is passing any gains or losses through to ratepayers. Donkin also claimed that the counterparties are financially sophisticated firms that are better positioned to evaluate hedging transactions.

Donkin testified that NorthWestern's actual hedging losses in 2012-13 were \$20.2 million, nearly \$5.3 million greater than forecast in Docket No. D2012.5.49. NorthWestern's actual hedging losses in 2013-14 were \$8.9 million, or 85% greater than forecast. He testified that actual hedging losses for July 2011 through June 2014 were \$56.5 million, \$9.5 million greater than the \$47 million that Kevin Markovich testified to in D2014.5.46. Donkin asserted that NorthWestern is forecasting hedging losses of \$6.5 million in 2014-15.

Donkin testified that with the Hydros in the supply mix, NorthWestern will have very little need to purchase electricity supplies at index prices, and by consequence would be exposed to very little supply price volatility. He concluded that there is no need to hedge in an effort to mitigate price volatility. Because indexed supply is expected to be low, an upward spike in market prices would likely have very little impact on total electricity supply costs.

John W. Wilson

John Wilson is President of J.W. Wilson & Associates. He submitted direct testimony for MCC regarding NorthWestern's authority to recover CU4 replacement power costs, and its claimed lost revenue adjustment (LRAM) related to transmission and distribution (T&D) and generation asset fixed costs.

Wilson testified that NorthWestern is seeking authority to recover \$8 million to \$11 million for the purchase of replacement power during the CU4 outage. He argued that before

requesting recovery from ratepayers, it would be prudent for NorthWestern to determine whether the plant operator (PPLM) believed that any of the overhaul work that caused the outage, in part or in whole, was performed improperly, negligently, or outside of industry standards. He stated that apparently NorthWestern has not conducted its own evaluation of this matter, and doesn't know if other owners have pursued recovery of replacement power costs from Siemens.

Wilson testified that although NorthWestern is evaluating insurance coverage for replacement power costs, it is too late for cost recovery in this case. In *Order 7219h*, affirmed by the District Court's decision in *Cause No. DV-13-399*, the Commission determined that NorthWestern's failure to evaluate outage insurance prior to incurring an outage was imprudent.

Wilson testified that it would have been prudent for NorthWestern to determine whether it could recover replacement power costs from Siemens, PPLM, or their insurers, prior to seeking recovery from its Montana ratepayers. He stated that NorthWestern believes that the most accurate estimate of these costs is \$8.243 million.

Wilson testified that CU4 power costs in 2013-14 were \$87.54 per MWh, by far the highest cost power on NorthWestern's system, except for a small amount of DGGs power. In 2012-13, a year with no forced outage, CU4 was NorthWestern's highest cost power source.

Wilson testified that NorthWestern achieved an \$800,000 cost savings with the decision to furlough 36 PPL workers for 90 days during the outage. He asserted that the Company does not intend to offset its recovery of replacement power costs with these savings.

Wilson testified that despite CU4's high cost relative to market alternatives, the Commission granted NorthWestern prior approval to recover CU4 fixed and running costs with the expectation that the action would protect ratepayers from market risk. He asserted that prior approval may make it reasonable to allow recovery of replacement power costs up to the total fixed and operating costs of CU4, but recovery beyond that amount does not seem reasonable.

Wilson recommended that the Commission should either deny recovery of replacement power costs, or allow partial recovery after NorthWestern clearly demonstrates its prudence.

Wilson testified that NorthWestern's claimed lost revenues have grown to \$12.6 million at a compound annual rate of 43% per year. He testified that the growth is due to robust and accumulated lost revenues since the last rate case in 2009. Only about 9% of the \$12.6 million total relates to estimated lost revenues in 2014-15, the rest is from prior years.

Wilson testified that while some accumulation of lost revenues over time is legitimate, savings in prior years are likely to decrease over time, particularly when the associated conservation practices have become widely adopted. Consumers learn by observing the experiences of others. As they find that financial savings are possible, consumers are motivated to conserve by their own economic interests. For example, a significant portion of claimed prior year lost revenues are associated with efficient lighting programs, although shifts to efficient lighting have been encouraged by laws and initiatives not related to NorthWestern's programs.

Wilson testified that NorthWestern is claiming \$3.2 million in CU4 lost revenues for tracker year 2013-14, despite having already collected \$4.1 million more than its authorized CU4 revenue requirement of \$72.7 million. He further testified that in addition to the \$8 to \$11 million in replacement power costs, and despite the fact that CU4 fixed cost recovery already exceeds the authorized revenue requirement, NorthWestern is seeking to claim \$1.6 million in CU4 lost revenues for the period when CU4 was out of service.

Wilson testified that NorthWestern is claiming \$775,684 in 2013-14 DGGs lost revenues when actual DGGs revenues exceeded the authorized revenue requirement by \$693,000, and that it is claiming \$5.9 million in 2013-14 T&D revenues when actual T&D revenues exceeded the authorized revenue requirement by \$18 million.

Wilson concluded that because lost revenues pyramid until they are zeroed out when the next general rate case is filed, the LRAM discourages NorthWestern from filing. He stated that the balancing of this growth of revenues and costs requires a general rate case to determine if rate changes are reasonable. Over time sales growth will increase revenues, while customer growth will tend to increase fixed T&D costs and investment in T&D assets. However, Wilson claimed that investments in generation assets like CU4 tend to depreciate over time, so that lost revenue rate adjustments are most likely to result in excessive charges to ratepayers.

Wilson testified that there is no evidence to support the claim that allowing NorthWestern to recover lost revenues would improve its energy conservation efforts or results in Montana. And since actual CU4 revenues exceed NorthWestern's authorized revenue requirement, the recovery of CU4 lost revenue is inconsistent with the establishment of just and reasonable rates.

Wilson recommended that the Commission should avoid single issue interim rate adjustments. It should base NorthWestern's rate adjustments on comprehensive revenue and

cost of service reviews within reasonably frequent general rate cases. Interim rate adjustments should be limited to traditional fuel and purchased power costs.

Summary of NorthWestern's Prefiled Rebuttal Testimony

Patrick R. Corcoran

Patrick Corcoran is NorthWestern's Vice President of Government and Regulatory Affairs. He described the framework used to recover electricity supply costs and rebutted the direct testimonies of Schlissel and Wilson.

Corcoran stated that purchased power costs have been recovered through the electricity supply cost tracker since 2002, as established by the Electric Utility Industry Restructuring and Customer Choice Act (1997). He asserted that the Commission has recognized that replacement power costs are electricity supply costs, citing to Order No. 7219h, ¶ 101.

Corcoran testified that the Commission is required by statute to allow full recovery of prudently incurred electricity supply costs. He asserted that the Commission may not defer cost recovery to a future proceeding, as suggested by Wilson and Schlissel.

Corcoran testified that neither Wilson nor Schlissel contended that NorthWestern purchased replacement power imprudently or paid an imprudent price. He also stated that if outage insurance was an alternative to replacement power costs, the cost of insurance would have to be included in rates. Corcoran concluded that Wilson and Schlissel are suggesting that the Commission obliterate its obligation to allow full recovery of prudently incurred costs.

Corcoran testified that, by statute, replacement power costs are recoverable in tracker rates, whether or not NorthWestern might have a cause of action against another party. If NorthWestern were to recover the costs later from other parties, its customers would receive the full benefit of this recovery through the deferred account.

Corcoran testified that a savings in labor expense due to worker furloughs during the outage is a general operating and maintenance expense, not an electricity supply cost. It is a component of a general rate case, and is not a supply cost tracking adjustment. He added that in Docket No. D2005.5.88, the Commission rejected NorthWestern's proposal to track labor costs for the DSM Program Coordinator, on the basis that the costs were not electricity supply costs.

Corcoran testified that Wilson's recommendation to remove the LRAM from these consolidated docket is at odds with the Commission decision in *Order No. 6674e*. Corcoran asserted that Docket No. D2014.6.53 is the appropriate forum to deliberate LRAM policy. He stated that in D2014.6.53 the Commission may have the power to prospectively reverse its decision to track lost revenues, but it would be inappropriate to retroactively reverse its decision in these consolidated dockets. NorthWestern has complied with *Order No. 6674e*.

James H. Goetz

James Goetz filed rebuttal testimony on behalf of NorthWestern. He addressed whether NorthWestern acted prudently in declining to pursue a claim for damages against Siemens, and whether NorthWestern should have pursued a damage claim against PPL as CU4 operator.

In Goetz' opinion, NorthWestern should not file a damage claim against Siemens. If it did file such a claim, the claim would be unsuccessful. NorthWestern is not a party to the contract with Siemens to overhaul CU4 in 2013. There is no privity between NorthWestern and Siemens. Goetz concluded that lacking any direct contractual relation, it would not have been prudent for NorthWestern to sue Siemens.

Goetz also testified that it would not have been prudent for PPLM to sue Siemens. He stated that the General Agreement¹ applies to the work done by Siemens on CU4, and provides that Siemens will not be liable for any indirect, special, incidental, or consequential damage. Article 81 of that agreement specifically precludes recovery of purchased or replacement power costs. Because of this provision, PPLM and its affiliates have no viable claim against Siemens.

Goetz testified that whether, and to what extent, NorthWestern investigated the option of seeking recovery from Siemens is not material, because there is no viable claim.

Goetz testified that in his opinion, any claim filed by NorthWestern against PPLM would be fruitless and imprudent. He stated that the Ownership and Operation Agreement² for CU3 and CU4 releases all owners and project users from consequential damages relating to replacement power costs. He asserted that the Root Cause Analysis, the MCC, and MEIC do not find fault with PPLM concerning the outage. Goetz concluded that any suit for recovery by NorthWestern against PPLM would not be prudent or advisable.

¹ The General Agreement is attached to the response to DR MEIC-069.

² The Ownership and Operation Agreement is attached to the response to DR MCC-019.

Fred Lyon

Fred Lyon filed rebuttal testimony on behalf of NorthWestern in order to address whether a waiver of consequential damages is standard in contracts between turbine manufacturers and utilities, and whether utilities typically obtain business interruption insurance in connection with the construction, maintenance, or repair of fossil fuel power plants.

Lyon testified that in his experience waivers of consequential damages, such as Article 81 of the January 1, 2006 agreement between Siemens and PPL, are the industry standard and are routinely included in major equipment repair and construction contracts utilized in the power industry. He testified that he has reviewed numerous contracts between utilities and Siemens, and that a mutual waiver of consequential damages has been included in every one.

Lyon testified that damages resulting from breach of contract or warranty are direct or consequential. Direct damages are an immediate result of the breach. Consequential damages are foreseeable losses that the breached party may experience as a result of the breach. Examples include loss of use, loss of goodwill, cost of substitute facilities, and the cost of replacement power. He added that in the power industry, the customary waiver will usually enumerate examples of consequential damages, such as the cost of replacement power. Lyon provided examples of agreements that contain a waiver of consequential damages.

Lyon testified that Article 81 of the agreement contains a customary waiver of consequential damages that specifically waives the cost of purchased or replacement power.

Lyon testified that the risk to vendors and contractors of consequential damages is potentially unlimited. If vendors and contractors were required to absorb the risk of consequential damages, they would include a substantial contingency in their price to reduce their exposure. Incorporation of a waiver of consequential damages into the contract provides the potential to deliver the project at a significantly reduced price.

Lyon testified that because the agreement and attendant waiver between PPL and Siemens was typical and consistent with market alternatives, PPL acted reasonably and prudently. To the extent that NorthWestern paid a portion of the replacement power costs, it also acted reasonably and prudently.

Lyon testified that in his experience, it is not typical for utilities to obtain business interruption insurance to hedge replacement power costs. Such insurance policies are expensive and incorporate large deductibles, exclusions, policy limits, and recovery restrictions based on

market fluctuations. Utilities typically do not consider such policies to be cost effective. He asserted that independent power producers and utilities that own nuclear plants are more likely to purchase outage insurance than a typical utility. The Nuclear Electric Insurance Limited mutual insurance company exists to sell outage insurance to nuclear facilities. He testified that there is no similar company serving the fossil industry.

Lyon testified that it was not imprudent for NorthWestern not to have evaluated the procurement of business interruption insurance in connection with the scheduled Colstrip outage. He stated that because it is well known in the industry that such insurance is not cost effective, NorthWestern's decisions not to purchase such insurance, and not to inquire into its cost and availability, were reasonable and prudent decisions.

Ronald A. Halpern

Ronald Halpern filed rebuttal testimony on behalf of NorthWestern regarding the root cause of the CU4 outage, and to rebut portions of Schlissel's direct testimony. He was retained by the CU4 operator, Talen Energy, to investigate the cause of the outage. He joint authored the Root Cause Analysis (RCA) with Robert Ward.

Halpern testified that the RCA does not conclusively establish the cause of the outage, because the physical evidence was destroyed due to melting of the core. The most likely cause was determined by prior circumstances, timing of events, and informed deduction. Halpern found that the most probable root cause was inadequate interlaminar insulation combined with damage from 1) Rotor insertion; 2) skid pan; or 3) installation of the air gap baffles.

Halpern testified that a generator includes a stator with heavy copper windings held in place by a core made of thousands of sheet steel laminations coated with an insulator known as Alkophos. The insulation prevents contact between the laminations. If the laminations have contact, that portion of the core can act as a conductor and create heat. Four or five laminations shorted together may create enough heat to begin melting the core.

Halpern testified that when the CU4 generator was constructed in 1985, the Alkophos insulation was state of the art. At the time, all Westinghouse generators used Alkophos. It is very thin – similar to paint on a wall. It was later determined that Alkophos could vary in thickness, including non-existence that could result in shorting and core damage. Normally the

bare spots were kept out of contact by adjacent layers. Halpern testified that the insulation coating in the generator at CU4 met industry acceptable tolerances.

Halpern testified that units constructed with Alkophos are not unreliable. Many generators using this insulation have been running successfully for many years, and to Halpern's knowledge, no generators have failed because of this factor.

Halpern testified that it was later determined that if the coating on several laminations was on the low side of the tolerance band, and these laminations were placed together, then the proximity of these laminations could present a weak spot. The weak spots would become an issue if the contiguous laminations were forced together to create heat and melt the core.

Halpern testified that the work performed during the generator overhaul could not have caused the catastrophic failure alone. The final electromagnetic core imperfection detector (El Cid) test proved that the core was not damaged by the maintenance work. The conditions of inadequate interlaminar insulation and reassembly damage are needed to explain the failure.

Halpern testified that a utility like NorthWestern is not typically aware of interlaminar insulation inspection procedures. Most utilities rely on the OEM to provide technical expertise for generator inspection and repair. Plant personnel do not normally include generator experts.

Halpern testified that El Cid testing is used throughout the industry to test the core during outages and at the completion of core work. It is considered standard industry practice. El Cid testing cannot be performed after the installation of the air gap baffles due to lack of room.

Halpern stated that to his knowledge, the only possible way of detecting the problem which occurred in this case would be a robotic inspection or a second El Cid test of the unit after it has been reassembled but before the air gap baffles are inserted, which is not an industry standard. *See* responses to DR MEIC-080 *and* DR PSC-60(b). He also stated that if generator reassembly is done in accordance with industry standards and without negligence; then rotor insertion, air gap baffle installation, or skid plate insertion could force the interlaminar insulation together, but should not damage the core. *See* response to DR MEIC-082.

Halpern testified that rotor insertion damage can occur but is rare and unforeseeable. The same is true for tooth distortion by the air gap baffle trains and the skid pan insertion. He noted that the core did not have prior similar problems. Halpern argued that since the failure was rare and caused by a combination of two conditions occurring at close to the same time, NorthWestern could not have foreseen or prevented it.

Robert T. Ward

Robert Ward filed rebuttal testimony on behalf of NorthWestern to address the CU4 core failure and whether there was reason to believe that the generator was at risk before the failure. He has worked for 63 years in the electric generation industry, with 45 years at Westinghouse Electric in generator design, manufacturing, and maintenance. He was retained to assist Halpern in developing the RCA for the 2013 CU4 outage.

Ward testified that he was assigned by Westinghouse to be the lead engineer for the 1987 forced outage at CU4. In that case a windage smoothing plate became loose to create a fault across several of the circuit rings, tripping the generator. There was extensive burning and circuit ring damage, and residue in the exciter end winding and core. The damage was contained in the exciter end of the generator and did not involve the core.

Ward testified that although he was not professionally involved with the CU4 outages in 1993, 2000, and 2001; in his opinion the appropriate repairs were performed on the unit. None of the prior outages would indicate a risk of generator core failure like that in 2013. None of the incidents would have involved the core lamination insulation. Ward stated that these prior outages do not suggest a pattern of problems that signaled failure in 2013.

Ward testified that the 1987 and 2009 outages were not significant failures. He also testified that core failures of Westinghouse generators have been very rare. There have only been a handful of catastrophic failures with large generators manufactured between 1976 and 1997. None of these core failures were similar to the 2013 CU4 failure.

Michael J. Barnes

Michael Barnes filed rebuttal testimony on behalf of NorthWestern regarding 1) Whether to file a lawsuit against Siemens or Talen to recover the cost of replacement power; 2) the overall performance of CU4; and 3) whether NorthWestern should have purchased outage insurance.

Barnes testified that NorthWestern has determined that it will not file suit against Siemens or Talen regarding the 2013 CU4 outage. To his knowledge, no other owner has filed, or intends to file suit against Siemens. He stated that FM Global, the property insurer for CU4, informed that it does not intend to file suit against Siemens to recover \$26.5 million in damage.

Barnes testified that it was not imprudent for NorthWestern to not ascertain whether Talen believed whether the work performed by Siemens was improper, negligent or not to

industry standards. The RCA was inconclusive and the contract between Siemens and Talen waived consequential damages. Regardless of the relation between Siemens and Talen, NorthWestern had to acquire replacement power for its customers.

Barnes testified that the overall performance of CU4, including CU3 through the reciprocal sharing agreement, has been good since coming into rates in 2009. The equivalent availability factor (EAF) at CU3 and CU4 has been 81.41% in 2009-2014, even with the outages in 2009 and 2013. From 2005-2014, the combined EAF was 85.02%, while from 1995-2004 it was 84.38%. The average EAF over the last 24 years is 84.34%. Barnes concluded that the EAF from 2009-2014 is less than 3% below the 24 year average.

Barnes testified that the 2009 outage was unrelated to the 2013 outage. The 2009 outage occurred because a small crack was identified where a blade was attached to a turbine shaft. The 2013 outage was the result of core failure. Barnes testified that it is not reasonable to believe that a blade crack in 2009 would indicate or predict core failure in 2013.

Barnes testified that he believes that CU4 has been a reliable asset to NorthWestern, especially when the CU3 reciprocal sharing agreement with Talen is considered.

Barnes testified that outage insurance for a coal-fired generating station is expensive and provides limited financial benefit. To his knowledge, none of the joint owners of CU4 had any outage insurance to cover the cost of replacement power on July 1, 2013.

Barnes testified that outage insurance risk isn't spread across many policyholders. It is "one-off" insurance where the replacement power cost risk is partially transferred to the insurer in return for annual premiums from the insured. The operating characteristics of the generator, expected market price of power over the covered period, and the insurer's margin determine the magnitudes of the annual premiums. According to Barnes, outage insurance is not designed to be a cost effective alternative to purchasing replacement power.

Barnes testified that he assisted in obtaining a price quote for outage insurance for CU3 and CU4 after the Commission issued Order No. 7219h (October 28, 2013). He provided copies of quotes from September 30, 2014, and March 6, 2015. *See Exhibit__*(MJB-1). He stated that if NorthWestern had procured this insurance, the insurer would only pay out during a covered event when the market price of electricity was higher than the strike price. The coverage was only offered for one year, with a policy limit of \$10 million, event duration of 150 days less the first five days of outage, and strike prices of \$20/MWh and \$35/MWh.

Barnes testified that in his opinion, if NorthWestern had purchased outage insurance during each year of its CU4 ownership, the insurance would not have been cost effective. *See* Exhibit__ (MJB-2). *See also* response to DR MEIC-094. From 2002 through 2014 estimated premiums total \$25.7 million and expected outage payments total \$10.6 million.

Kevin J. Markovich

Kevin Markovich filed rebuttal testimony regarding NorthWestern's hedging practices and to support a replacement power cost estimate of \$8.2 million.

Markovich testified that Donkin's use of "hedging losses" is confusing, because NorthWestern hedges to mitigate price risk, not to profit from price movements. NorthWestern does not engage in speculative trading.

Markovich testified that NorthWestern uses on-system and off-system hedges. On-system hedges include owned resources and fixed price contracts. Off-system hedges include fixed-for-float transactions at Mid-C.

Regarding Donkin's claim that NorthWestern's counterparties may have greater incentive to profit from hedging because their own money is at risk, Markovich testified that in order to ensure that counterparties would win their hedging bets, the counterparties would have to be able to influence future market prices. This would be very difficult given MidC's electronic trading platform, liquid market, transparent pricing, and regulatory oversight.

Markovich testified that off-system fixed price hedge transactions are a valuable tool to mitigate price risk to customers. Market price changes reflect changes in market conditions and fundamentals, and do not result from one party being more sophisticated than another.

Markovich testified that NorthWestern's hedging strategy is being evaluated in light of its hydroelectric acquisition, as a part of its 2015 electricity supply resource procurement plan. He testified that NorthWestern will be short of on-peak energy in high load months, and long on energy in all off-peak periods. It must purchase higher priced on-peak energy and sell off-peak energy. Since on-peak energy prices are higher and more volatile, NorthWestern's customers will still be exposed to market price risk. Markovich stated that on July 1, 2015, on-peak prices were over \$60/MWh higher than off-peak prices.

Markovich testified that NorthWestern has not entered into any new off-system fixed price term purchases at Mid-C since acquiring the Hydros.

Markovich testified that NorthWestern's hedging plan has worked for many years. Under the plan, portfolio costs move in the same direction as the market, but less dramatically. Rates have decreased while customers are insulated from the risk of rising prices. The plan is disciplined, flexible, robust, and in conformance with approved procurement guidelines.

Markovich testified that NorthWestern believes the most accurate estimate of replacement power costs from the 2013 CU4 outage is \$8.2 million. Exhibit__ (KJM-1) shows the calculation. The figure is based on the historical capacity of CU4 and incorporates actual market prices paid for energy by NorthWestern during the outage. Markovich stated that CU3 capacity should not be used as a proxy because CU3 and CU4 are separate units with separate operating and maintenance histories. It is more appropriate to use the production forecast from the 2013-14 annual tracker filing, a forecast that is based on the historical operating performance of CU3 and CU4, and that considers the reciprocal sharing agreement.

Joe Schwartzenberger

Joe Schwartzenberger filed testimony to correct NorthWestern's 2013-14 lost revenue estimates for the 8.6% CFL storage rate as required by Order No. 7219h, ¶¶ 68, 76. The previous most recent update to 2013-14 lost revenues, provided in response to DR PSC-061, was \$10,058,433. Schwartzenberger's correction changes this figure to \$9,997,974.